



Success Stories

Volume 2, Issue 5

May 2003

White Mountain Rescues Owe Success to Partners

The 2002-2003 winter season on New Hampshire's Mount Washington began with a somber reminder that the East is not immune to deadly avalanches.

The first avalanche occurred November 29 in Tuckerman Ravine, burying four of seven climbers and killing two. Four climbers were caught in another avalanche two days later in the Ravine, seriously injuring one. In February, two skiers narrowly avoided falling victim to another avalanche.

Forest Service Snow Rangers with the White Mountain National Forest operate the Mount Washington Avalanche Center, aimed at promoting public safety in Tuckerman and Huntington Ravines – two neighboring glacial cirques located high on the eastern flank of Mount Washington.

Tuckerman Ravine is renowned for amassing a deep snowpack – 70 feet by April is common – and being slow to lose it. The combination of deep snow and steep slopes has attracted thousands of adventurous skiers each year for decades, with most flocking to the ravine on warm spring days to carve the last turns of the season.



When emergencies arise, fast action by teams of dedicated partners work to save lives.

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Huntington Ravine collects ice on its steep walls and gullies, making it a premier destination for technical ice climbing. With throngs of visitors coming to the ravines to pursue these risky outdoor adventures, the Snow Rangers stay busy.

Their goal is to give visitors enough accurate and timely information about conditions in the ravines to help them make informed choices about entering the backcountry or not, and being prepared for the hazards they may encounter.

The Snow Rangers begin making daily visits to the ravines before most folks even begin to think about skiing. Each day they assess the conditions and issue the daily "Avalanche Advisory."

The Advisory identifies the risk of avalanches and other hazards expected for the day. The winter hazards are many—frigid temperatures, avalanches, white-out conditions, and unstable ice. Spring brings deep crevasses in the snowpack, snow undermined by icy streams running below the surface, and ice chunks as big as cars tumbling off the ravine walls.

When visitors make the wrong choices and accidents happen, there is a dedicated community of people who respond to the call for help. Forest Service Snow Rangers are joined by staff from the New Hampshire Fish and Game—along with a great many volunteers—that together form the Search and Rescue Working Group.

This behind-the-scenes partnership is vital to the safety and well-being of backcountry visitors. Members of the Working Group stay connected through regular meetings, joint trainings, shoulder-to-shoulder responses to people in need, and debriefings after major incidents.

The Forest Service's role in search and rescue is enhanced by the dedication of the extraordinary people ready and willing to help when called to assist in life-threatening situations.



Midewin Opens New HQ Building



Dignitaries look on as the Midewin ribbon cutting ceremony unfolds May 16.

The mood was festive, the company congenial, and the weather perfect for the weekend of events celebrating the grand opening of the Midewin National Tallgrass Prairie's new headquarters building. The activities began with a public lecture and ended with an old timers picnic, and attracted nearly 700 people.

The highlight of the weekend was the Ribbon Cutting Ceremony on May 16. The Shki Bmaadzi—from the Urban Natives of Chicago Youth Council—contributed drumming and singing, colorful dancing, and extended their best wishes for the Prairie.

Speakers and official ribbon cutters included Brian Anderson, Director of Resource Conservation, Illinois Department of Natural Resources ; Jerry Adelmann, Executive Director, Openlands Project; Tom Thompson, Deputy Chief, National Forest Systems, USDA Forest Service; Marianne Hahn, President, Midewin Tallgrass Prairie Alliance; Ruth Voltz, Deputy Regional Forester, Eastern Region, USDA Forest Service; Logan Lee,

Prairie Supervisor, Midewin National Tallgrass Prairie, USDA Forest Service; and Tony McGann, Mayor, City of Wilmington, Illinois.

Following the formal cutting of the ribbon, guests took guided tours of the new office building, visited exhibits in the Welcome Center, and indulged in a buffet sponsored by a local corporate partner.

While nearly every Midewin staff member was involved in planning and executing the Grand Opening events, 18 Midewin volunteers also donated 256 hours staffing the Welcome Center, guiding tours, and helping out wherever needed during the weekend.

Partnerships between the Forest Service, the Alliance, our volunteers, and our corporate partners were fundamental not only to ensuring the success of the Grand Opening celebration, but in supporting our joint efforts today and in the future toward achieving the vision of prairie restoration at Midewin.

Wayne NF Signs Cost Share Agreement

The Wayne National Forest and Rural Action signed a Challenge Cost Share Agreement recently to correct several water quality problems in the Big Four Hollow watershed.

The agreement brings together Ohio Department of Natural Resources, Division of Minerals Resource Management; the Monday Creek Restoration Project; and the Wayne National Forest, with each contributing money for the needed work.

The team will deal with problems that include acid mine drainage seeps produced in abandoned coalmines, a stream channel blocked by strip mining, and erosion triggered by mining activities. They have proposed treating the acid water coming from the seeps with limestone and reconstructing the blocked channel.

The Wayne National Forest has been involved several similar agreements in the community.



Signatories to the Wayne's latest cost-share agreement finish the paperwork for the deal.





Duo Recognized With National Honors

The National Field Soil Scientist Award was recently presented to Stephen Fay and Dr. Scott Bailey for their unique collaboration on forest-soils relations.

The combined work by Fay—a soil scientist on the White Mountain National Forest—and Bailey—a research geologist with the Northeastern Research Station—now serves as a model for NFS-Research cooperation nationwide.

Much of their work focused on soil calcium—an important nutrient that, when depleted, adversely affects forest productivity and species viability. Since beginning their collaborative efforts in 1999, Fay and Bailey have improved our understanding of soil fertility and forest-health relations on the WMNF; developed useable tools to transfer this knowledge to practicing foresters, silviculturists, hydrologists and fish biologists; and established a forest-wide soil-quality database and monitoring program that jointly services the WMNF and NRS.

The cumulative impacts of past land use, current forest management, and acid deposition on depletion of essential soil nutrients—especially calcium—were first highlighted in the 1980s in watershed studies across New England. Drawing from this research and using local biomass accumulation equations, Fay developed a system for evaluating the potential for nutrient depletion under various management alternatives.

This system has been used forest-wide to compare the potential impacts of silvicultural alternatives on soil fertility. Use of these tables is a routine part of environmental analysis for timber sales on the WMNF, including evaluation of application of whole-tree harvesting.

Fay however, recognized the limitations of his approach due to the wide variety of site factors found at specific project locations, many of which were outside the range represented by the experimental areas where the supporting research had been conducted.

Bailey was concurrently working on the limitations of applying site-level research results to larger areas. This led to his conception of the “till source model,” an approach that recognizes that soils in the Northeast are largely derived from glacially transported materials from diverse bedrock source areas. This method uses existing data on glacial-flow directions and bedrock composition to map differences in parent material mineralogy and chemistry. The information is used to determine spatial patterns in site fertility and sensitivity to nutrient depletion. Initially developed at the 80-acre Cone Pond Research Watershed, the forest-wide application of the till source model presented a number of problems. Thanks however to Fay’s extensive knowledge of the WMNF coupled with forest-wide data layers and GIS analysis methods, the projects moved ahead.

In 1999, Fay obtained funding to advance Bailey’s model and build the requisite data layers needed to apply the model to the WMNF. This significantly improved the quality of model predictions and resulted in a far more efficient computer application.

Over the next two years, Bailey and Fay verified till source model predictions of soil chemistry with collection of field data from 40 sites representing the range of mineralogy across the WMNF. At each site, detailed data were collected, along with data on forest composition and ground flora. This effort produced the first spatially explicit soil data set in New England.

Fay and Bailey recently held a workshop on “Soil Nutrient Depletion—Integrating Research and Management” in May to expand dialogue between forest researchers and managers of the northeastern national forests. This meeting examined ways by which National Forests can improve management to help maintain the long-term productivity of the land, as required by the National Forest Management Act.



The efforts of Fay and Bailey led to the National Field Soil Scientist Award this year.





Mules Key in Accomplishing Trail Work



The mule train was able to haul tons of gravel and other supplies in support of trail maintenance work in the Deam wilderness.

“Tyson is the one that wishes he’d gotten an education. He doesn’t enjoy his job much,” Rick Taylor said of one of the sorrel-colored mules in the train that lurched forward when the gravel spilled out of the packs suspended from his saddle.

Tyson eventually settled down and patiently waited while Jack—the mule behind him—got his load dumped so the train could head back up the hill in the Hoosier National Forest.

Taylor and Jim Ramirez work as a team with their animals. They know each animal and its individual personalities. Taylor, Ramirez, and the buckskin horse and six mules they brought with them from the Bridger-Teton National Forest were on the Hoosier during May working on a trail maintenance project in the Charles C. Deam Wilderness.

This is the second year the crew has assisted on the Hoosier. In that time, they’ve developed a superb relationship not only with the Forest recreation staff, but also with the two mules and horse “on staff” at the Hoosier.

Over the four-week period the mule train was in town, they put in long days moving approximately one ton of gravel on each trip. In total, over 300 tons of gravel was hauled into the wilderness and spread on trails. Stabilizing or “hardening” the thick clay soils of Indiana with gravel is critical to provide a usable

trail surface while also protecting the resources.

The gravel was dumped at trailheads. Taylor and Ramirez filled five-gallon buckets with gravel, then each man would dump the gravel in tandem to keep a balanced load on their animals. Each animal on the trip carried twenty gallons—or about 250 pounds of stone. The mule string was also used to pack in rolls of geotextile and lumber for turnpikes.

While on the Forest, the mule train helped construct a one-mile trail reroute on the Axsom Branch Trail as well as a half-mile reconstruction on the same trail. They also maintained sections on another 1.5-mile trail in the interior of the Wilderness.

Ramirez led the team astride Buck, a buckskin gelding who was adopted from the wild horse program and still bears his brand from the Bureau of Land Management. Behind Buck—in a straight file—are Mattie, Rose, Fox, Moe, Jim, Tyson, and Jack.

When the trail was wide enough the mules form a zigzag line, each walking offset from the one in front. But when the trail narrowed, they fell in line single-file. Once the animals reached the stretch of trail where the gravel was needed, Ramirez brought Mattie to the far end and they dumped her gravel, always in tandem so the mule’s load is balanced.

The animals moved, up to dump the next mule’s load, or they dumped the load in place to cover a 60-foot stretch of trail. Once unloaded, continued back up the trail. Depending on the location of the gravel source, each round trip could take as little as ten minutes or up to one hour. The train often worked 12-hour days, but the mules moved as deliberately and patiently on the last trip as they did on the first.

The Hoosier’s mule Jack seemed to enjoy working with the group as well. Taylor said each mule has their quirks of where they prefer to be in line, and which animal they prefer to follow in the pack string.

Both men said they enjoyed what is becoming an annual visit to the Hoosier. And their counterparts on the Hoosier share that sentiment.

“Having Rick and Jim come with their animals makes a huge difference in our ability to maintain the trails that are on the interior of the area,” said Wilderness Ranger Rod Fahl. “Their pack train moves six times more gravel with every trip than we could accomplish alone with Jack. We hope this is a partnership that we can continue in the future.”



Seminar Series Ends With Dombeck Speech

Former Forest Service Chief Mike Dombeck delivered a key message April 29 at the close of this year's R9 'Natural Resources Connections' seminar series which was co-sponsored and hosted by Wisconsin Lutheran College in Milwaukee.

Following his remarks, Dombeck made a point of spending time shaking hands with old friends, and answering questions from students in the audience. Dombeck, who stepped down as Chief in 2001, is currently GEM Pioneer Professor and University of Wisconsin Fellow of Global Conservation.

The speech—entitled 'Conservation Challenges for a New Century'—outlined critical natural resource issues, and warned these issues will gain in importance in coming decades.

"We must connect peoples' hearts and minds with the land and the outdoors," Dombeck said. "We must build support for good land management. It's the patriotic thing to do."

Over the four-month series, Washington Office staff, Eastern Region employees, and the Office of General Counsel from Milwaukee presented seminars with overviews of the Lake Superior Bi-National Program, Forest Planning, Hydropower, Sensitive Species, Forest Disturbance and Fire Ecology, Sustainable Water Resource Management, Geographic Information Systems and Abandoned Mine Lands.

Nick Schmal, Eastern Region Aquatic Technical Team Leader and 'Connections' facilitator, gave credit for the program's broad appeal to the excellent speakers that took part in the series.

"These are great opportunities to hear from a variety of great sources of knowledge," he said.

Schmal said Eastern Region employees would soon begin developing next year's 'Connections' series and seeking to further improve on the community outreach opportunities inspired by the 2002-2003 program.



Dr. Dombeck spent time following his remarks to answer questions from students.

Cut Sioux Horse Camp Thrives on Old Loggers' Site



More than 120 miles of established trails are available for horseback riding at the Cut Sioux Camp.

From 1890 to 1908, people depended on horses to travel from Deer River to Northome. The first Ranger in the Cut Foot Sioux area traveled with a two-hitch team whenever venturing out into the forestland that would eventually become the Chippewa National Forest.

In 1910, Sam Simpson and the Northland Pine Lumber Company were successful in obtaining a large contract for logging pine from the Cut Foot Sioux area. Simpson's logging crew utilized horse-power to pull pine logs out of the woods.

Records show that the logging camp employed 60 men and 30 horses. Even today, horses are used to pull logs out of non-motorized areas on the Forest. Today the Cut Foot Sioux Horse Camp and Trail System lies within the area used by the early loggers.

The concept of the Cut Foot Sioux Horse Camp began in 1985. After several years of discussion, a partnership was formed in 1995 with the Minnesota Horse Council and the process took shape.

Efforts over the next three years involved research, enlisting more partners, surveying, designing and preparing the site. In 1998, the first loop was completed and in 2002, the second loop of the camp opened. The Horse Camp now offers 34 campsites.

The Cut Foot Sioux Horse Camp lies within the Cut Foot Experimental Forest, located on the Deer River Ranger District on the Chippewa. It is surrounded by over 120 miles of forest roads and recreation trails for equestrian use.



Land Purchase Benefits Heritage Resources



The Etna Iron Furnace Stack was built more than 170 years ago in Lawrence County, Ohio.

The Wayne National Forest recently acquired another nugget in the rich history of Ohio, as part of a 718-acre land purchase on the Ironton Ranger District. This purchase included six tracts, one of which contains the historic Etna Iron Furnace.

The Trust for Public Land-Ohio Chapter assisted the Forest Service in the purchase from Mead/Westvaco. The acquisition involved six non-contiguous tracts of woodland that significantly improved consolidation and improved access to public lands.

The historic Etna Iron Furnace site has a standing furnace stack. The site is along County Road 4, less than a mile north of the Ironton Ranger District Office. It is one of only a few standing iron furnace stacks remaining in the region that once boasted 46 charcoal iron furnaces in the famous Hanging Rock Iron Region. The nearby Vesuvius Iron Furnace—within the Lake Vesuvius Recreation Area—is listed on the National Register of Historic Places.

The Etna Furnace was constructed in 1832 by James Rodgers, John Sparks and Valentine Fear. It continued in operation until it closed in 1887. Today only the furnace stack remains.

The region has produced iron for over 100 years, leading the nation in iron production in 1875. The region's iron was critical during the Civil War when the steel hulls for both the Merrimac and the Monitor were fired from ore mined in this region. The Hanging Rock Iron District was one of only three places capable of producing the high quality iron needed for heavy cannon during the Civil War.

Other armaments as well as pots, kettles, wagon wheels, and other implements were made of iron from this region. Hanging Rock iron was noted for its rust and corrosion-resistant characteristics. It is said that during the War, the demand for iron became so great that many iron masters would start the pigs of iron off to war before they cooled, and occasionally the hot iron would set the wagons on fire on the way to market.

The land acquisition program on the Wayne improves benefits to the public for recreation, watershed and resource protection, endangered species habitat, and heritage resources. Each of these tracks helped consolidate public land to

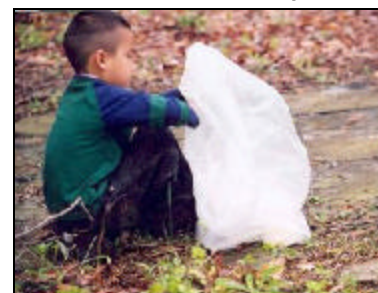
Earth Day Celebrated at Lake Vesuvius on the Wayne

The Earth Day celebration at Lake Vesuvius on the Wayne National Forest was a “blast” thanks to a presentation by Dr. Robert Culp of the Ohio University Southern Campus.

In his science presentation, “The Science Wizard” explained the mystery behind air pressure, loud noises, and chemical reactions. His presentation, as always, was well done as the Science Wizard was in full costume with long white hair and tall hat.

The Science Wizard was only one of the events that drew a crowd for the Earth Day events at Lake Vesuvius. Among the audience were pupils from Chesapeake Elementary School that brought their classes out for the programs and activities.

The day began with a visit to the Nature Center. Joel Keeton of Ohio University presented a reptile program while another facilitator discussed the different leaves that can be found around the Lake Vesuvius Recreation Area. Connie Roberts from the Forest Supervisor's Office in Nelsonville spoke about reducing, recycling, and re-using to help the Earth. She brought the message to life by tying in some history about the Wayne National Forest.



Mickey Sanchez, a student at Chesapeake Elementary School, picks up trash at the Earth Day celebration.



Allegheny Interpretive Trail Tour Unhampered By Damp Weather



A determined group on the Allegheny braved wet conditions to get a first-hand look at the Timberdoodle Flat Interpretive Trail.

The Pennsylvania Game Commission Becoming an Outdoor Woman Program—in conjunction with the National Wild Turkey Federation Women in the Outdoors Program—sponsored a joint event at the University of Pittsburgh in Bradford, Pennsylvania.

Both of these programs were designed to provide women the opportunity to learn new outdoor skills in a relaxed setting. These events—held May 30 through June 1—provided participants with an opportunity to learn from experts representing the Pennsylvania Game Commission, the Pennsylvania Fish and Boat Commission, the Forest Service, and the University of Pittsburgh.

The event included a session on exploring the Allegheny National Forest. Mary Hosmer, a public affairs specialist on the Allegheny, led a group of ladies on a hike through a portion of the Forest.

She used the Timberdoodle Flats Interpretive Trail to educate the group on different types of habitat, the animals who depend on a particular habitat to survive, and the need for a diversity of habitat types. The Timberdoodle Flats Interpretive Trail is located on an old farm site that is being managed by the Forest Service to maintain a diversity of habitat areas including new growth forests, cool and warm season grassland openings, wetlands, and older growth forests.

The site provided an excellent teaching aid for the session as everyone could see the differences in the surroundings as they wandered along the trail.

Unfortunately, the weather did not cooperate. The entire hike was spent in a soaking rain. However, Mary provided such an excellent program that no one was sorry that they chose to spend a day walking in the rain. The only regret expressed was how much nicer it would have been had the sun come out.



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